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The Law Offices of John C. Scott, LLC  
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EXAMINER

YANG, CLARA I

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/813,178

Applicant(s)

SENGUPTA ET AL.

Examiner

Clara Yang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20 and 29-35 is/are rejected.
- 7) ☒ Claim(s) 13, 21 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 21 September 2006 with respect to claims 1-21 and 29-36 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments, see page 10, filed on 21 September 2006, with respect to the rejection of claim 3 have been fully considered and are persuasive. The 35 USC §112, first paragraph rejection of claim 3 has been withdrawn.

### *Claim Objections*

3. Claim 32 is objected to because of the following informalities: Change "coupled to at lest" to "coupled to at least". Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

4. Claims 29-31 are rejected under 35 U.S.C. 101 because the phrase "An article comprising a storage medium having instructions stored thereon that, when executed by a computing platform" in nonstatutory. First, a "storage medium having instructions" is not a computer-readable medium or a computer memory from which a computer retrieves and executes the instructions stored therein. A "storage medium" could be a piece of paper with written instructions, such as a flowchart or computer code. Consequently, the invention called for in claims 29-31 is directed to a *description* of the instructions and is therefore descriptive material and nonstatutory. Secondly, the phrase "computing platform" refers to a computer architecture that uses a particular operating system, not to the computer itself.

A claim including a computer program as part of a statutory manufacture or machine remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the

computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami et al. (US 6,483,929).

Referring to claim 7, as shown in Figs. 1-4, Murakami teaches an electronic appliance 10, which is a mobile phone or a wireless body appliance, comprising (a) signal transmitter 20, signal receiver 22, and chip 30 forming biometric authentication device 12's sensor that measures biometric information from a user wearing electronic appliance 10 (see Col. 10, lines 37-67 and Col. 11, lines 1-17); (b) biometric authentication unit within chip 30 that determines whether the user is an authorized user associated with electronic appliance 10 based on the measured biometric information (see Col. 11, lines 17-21); and (c) a wireless transceiver that sends and receives calls only after the user has been authenticated and electronic appliance 10 is activated (see Col. 11, lines 19-21). Because electronic appliance 10 is enabled only if the measured biometric information is the same as the stored, electronic appliance 10's wireless transmission signals indicate that the user has been authenticated. In addition, Murakami teaches that biometric authentication device 12's sensor measures a user's heart rate (i.e., heartbeat) (see Col. 9, lines 39-43 and 62-67; and Col. 14, lines 22-57).

Regarding claim 12, because Murakami's electronic device 10 is a mobile phone, electronic device 10 must also include at least one notification structure that notifies a user of the occurrence of an incoming call (i.e., an event).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-6, 15-20, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coughlin et al. (US 2004/0257202) in view of Smith (US 2003/0025603) and Xydis (US 6,307,471). The Coughlin et al. reference claims benefit of US provisional applications No. 60/479,752, filed on 19 June 2003; No. 60/483,012, filed on 26 June 2003; and No. 60/484,495, filed on 2 July 2003.

Referring to claims 1-4, 15, 17, 18, and 29, as shown in Fig. 6, Coughlin teaches a secured system 200 including an identification (ID) tag 10, which is a wireless body appliance, and

computer 202, which is a personal digital assistant (PDA) or a wireless device (see Sections [0011], [0042], [0046], [0047], and [0060]). Computer 202 is hereinafter referred to as "PDA 202." As called for in claims 1, 15, and 29, Coughlin's PDA 202 performs the following functions: (a) receiving a radio frequency (RF) ID signal from tag 10 (see Section [0060]); (b) determining that tag 10 is within a predetermined distance upon detecting tag 10's ID signal (see Sections [0060] and [0062]); (c) automatically logging in the user when the user is within the predetermined distance and if tag 10's ID signal is valid (see Sections [0060] and [0062]); and (d) automatically locking while keeping the user logged in when the user is determined to be outside the predetermined distance (see Section [0065]). Because Coughlin discloses that PDA 202 automatically locks without logging out the user when the user leaves the vicinity, PDA 202 logs in a user only when the user is logged out of PDA 202. As additionally called for in claim 15, Coughlin's PDA 202 includes an RF circuit, which includes (a) a wireless transceiver that transmits interrogation signals and receives tag 10's ID signal (see Section [0060]). In Section [0061], Coughlin teaches that display 204 and keyboard 206, as shown in Fig. 6, take any of a variety of forms; thus PDA 202 also includes (b) display 204 and keyboard 206 as user interfaces. In addition, as further called for in claim 15, Coughlin's PDA 202 must have (c) a controller to accept a user's input via keyboard 206, to deliver output to the user via display 204, and to perform the previously described functions called for in claims 1, 15, and 29 (see Sections [0064] and [0065]). Coughlin, however, fails to teach that (1) tag 10's ID signal indicates that the user has been authenticated (as called for in claims 1, 15, and 29); (2) PDA 202 determines that a user is within a predetermined distance after receiving tag 10's ID signal (as called for in claims 1, 15, and 29); (3) tag 10 authenticates the user using biometric authentication (as called for in claim 2); (4) the predetermined distance is less than tag 10's

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wireless range (as called for in claim 3); (5) PDA 202 determines whether a user is within a predetermined distance by determining whether a power level being received from tag 10 is above a threshold level (as called for in claims 4 and 17); and (6) PDA 202's wireless transceiver is configured in accordance with a Bluetooth™ protocol (as called for in claim 18).

In an analogous art, Smith teaches a master authenticator 10 (i.e., a wireless body appliance) that is worn by a user and wirelessly transmits information associated with the user to a remotely located electronic device (i.e., a wireless device), which includes a personal digital assistant (PDA) (see Abstract and Sections [0005]-[0007] and [0011]). As shown in Fig. 2, Smith's master authenticator 10 determines if it is worn by a user via sensor 12 at step 20 (see Section [0006]). If sensor 12 indicates that a user is properly wearing master authenticator 10 at step 22, master authenticator 10 allows the user to login and authenticates the user based on the login (see Sections [0006] and [0016]). Once a user successfully logs in, master authenticator 10's login means 14 authorizes transmitter 16 to transmit secure information (i.e., information associated with the user) at step 40 (see Section [0007]). Master authenticator 10 then monitors the immediate surrounding area to determine whether a compatible PDA (i.e., wireless device) is present at step 50 (see Section [0007]). Because Smith discloses that a PDA determines that a valid master authenticator 10 is within a predetermined distance by transmitting a query to determine if a master authenticator 10 is present and "logged on" (see Section [0011], lines 20-24), the examiner understands that Smith's master authenticator 10 determines that a compatible PDA is present at step 50 when a query is received from the PDA (as described in Section [0011], lines 20-24) and that transmitter 16 then transmits information indicating successful authentication and user login in response to receiving the query (see Fig. 2, step 60). As called for in claims 1, 15, and 29, Smith's PDA then (a) receives master authenticator 10's

wireless signal containing information that indicates that an authenticated user is logged on (see Sections [0007] and [0011]); (b) determines from the wireless signal that master authenticator 10 is valid (i.e., is in the PDA's database) based on the received information (see Section [0011], lines 20-31); and (c) automatically logs in the user if master authenticator 10 is a valid master authenticator (see Section [0011]). In Section [0011], lines 20-24, Smith teaches that when powering on the PDA, the PDA's software application first sends out a query to determine if a valid master authenticator is present and "logged on." In other words, the process described in Section [0011], lines 20-31, begins while the PDA is initially powered off; thus the user is not logged in the PDA. Because Smith discloses that the PDA continues with a login routine that the user must complete before accessing the PDA when the PDA fails to find a valid master authenticator present and that the PDA continues "uninterrupted" when the PDA finds a valid master authenticator, the examiner understands that the PDA automatically logs in the user when the PDA finds a valid master authenticator. Regarding claim 2, Smith teaches that master authenticator 10 comprises (a) at least one biometric sensor (see Sections [0006] and [0016]); (b) a biometric authentication unit that determines whether the user is authorized with master authenticator 10 based on the user's biometric information (see Sections [0005], [0006], [0008], and [0016]); and (c) transmitter 16 that transmits a wireless signal indicating that the user has been authenticated when the biometric authentication unit determines that the user is authorized (see Fig. 2, step 60 and Sections [0005], [0007], [0008], and [0016]). Regarding claim 18, Smith teaches that the PDA is configured in accordance with a Bluetooth™ protocol (see Section [0011]). Regarding claim 21,

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Coughlin's tag 10 as taught by Smith because a tag 10 that



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authenticates the user using biometric authentication (as called for in claim 2) and transmits an ID signal indicating that the user has been authenticated (as called for in claims 1, 15, and 29) prevents an unauthorized user from using tag 10 to access PDA 202 (see Smith, Section [0005] and Coughlin, Section [0066]), thereby improving Coughlin's secured system 200. In addition, PDA 202's wireless transceiver being configured in accordance with a Bluetooth™ protocol is advantageous since such a wireless transceiver enables PDA 202 to communicate with other Bluetooth™ devices, and the protocol is well suited for short-range applications (see Smith, Sections [0009]).

In another analogous art, Xydis, as shown in Fig. 2, teaches electronic device 14, which include cellular phones or any other electronic equipment (i.e., wireless devices), having a plurality of antennas 18, measurement device 20, antenna switch 22, and processor 24 (see Col. 2, lines 51-67 and Col. 3, lines 1-4). Per Xydis, electronic device 14 performs the following functions, as called for in claims 1 and 29: (a) receiving token 12's RF signal 10, wherein token 12 is a badge or wireless body appliance (see Col. 2, lines 25-33, 40-42, and 51-65); (b) measuring token 12's RF signal 10 to determine if a user is within a predetermined distance (see Col. 3, lines 13-26 and 38-42); (c) granting the user access if RF signal 10 is above an operational threshold at any of the antennas, which indicates that the user is within the predetermined distance (see Col. 3, lines 66-67 and Col. 4, lines 1-5); and (d) disabling itself if RF signal 10 is below the operational threshold at every antenna, which indicates that the user is outside the predetermined distance (see Col. 3, lines 22-26 and 62-65). As called for in claims 4 and 17, Xydis teaches that electric device 14 measures a received signal RF 10's strength (i.e., power level) and then compares the measured strength to an operational threshold (see Col. 3, lines 22-

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26, 38-42, and 62-65); thus Xydis's predetermined distance is less than token 12's wireless range, as called for in claim 3.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Coughlin and Smith's tag 10 as taught by Xydis because additional security and greater user mobility are provided (see Xydis, Col. 1, lines 28-36 and 51-63) when (1) PDA 202 determines that a user is within a predetermined distance after receiving tag 10's ID signal at a plurality of antennas (as called for in claims 1 and 29); (2) the predetermined distance is less than tag 10's wireless range (as called for in claim 3); and (3) PDA 202 determines whether a user is within a predetermined distance by determining whether a power level being received from tag 10 is above a threshold level (as called for in claim 4).

Regarding claims 5, 19, and 30, Coughlin, as modified by Smith and Xydis, teaches PDA 202 automatically unlocks when the user is already logged in PDA 202 and returns within the predetermined distance (see Coughlin, Section [0065]).

Regarding claims 6, 20, and 31, Coughlin, as modified by Smith and Xydis, teaches that PDA 202 periodically transmits an interrogation signal, thereby repeating at periodic intervals the steps of (1) determining whether a user is within a predetermined distance after receiving tag 10's ID signal, which indicates that the user is authenticated, (2) automatically logging in the user if the user is logged out and within the predetermined distance, (3) automatically locking if the user is logged in and ventures outside the predetermined distance, and (4) automatically unlocking if the user is logged in and has returned within the predetermined distance (see Coughlin, Sections [0060] and [0062]-[0064]).

Regarding claim 16, as explained in the previous rejection of claim 15, Coughlin's PDA 202 comprises display 204 and keyboard 206 (see Section [0061]).

10. Claims 7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 2003/0025603) in view of Murakami et al. (US 6,483,929).

Referring to claim 7, as shown in Fig. 1, Smith teaches that master authenticator 10 (i.e., a wireless body appliance) comprises (a) at least one biometric sensor (see Sections [0006] and [0016]); (b) a biometric authentication unit that determines whether the user is authorized with master authenticator 10 based on the user's biometric information (see Sections [0005], [0006], [0008], and [0016]); and (c) wireless transmitter 16 that transmits a wireless signal indicating that the user has been authenticated when the biometric authentication unit determines that the user is authorized (see Fig. 2, step 60 and Sections [0005], [0007], [0008], and [0016]). Smith's biometric sensor, however, is a voice sensor, not a heartbeat sensor.

In an analogous art, as explained in the 35 USC §102(b) rejection of claim 7, Murakami teaches a wireless body appliance having a heartbeat sensor.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Smith's master authenticator 10 as taught by Murakami because (1) voice recognition devices have problems screening out background noise (see Murakami, Col. 2, lines 17-19), and (2) heartbeat sensors do not require expensive scanning equipment and are unaffected by behavioral variability (see Murakami, Col. 4, lines 36-42).

Regarding claim 11, Smith teaches that master authenticator 10 is configured in accordance with a Bluetooth™ protocol (see Sections [0009], [0011], and [0014]).

Regarding claim 12, Smith's master authenticator 10 has a display or some other notification structure, such as an audible tone generator for generating a beep, that notifies the user that an event has occurred (see Sections [0011] and [0012]).

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 2003/0025603) in view of Murakami et al. (US 6,483,929) as applied to claim 7 above, and further in view of Stockhammer (US 2002/0190125).

Regarding claims 8 and 9, Smith and Murakami fail to teach that master authenticator 10 includes a glove (as called for in claim 8), a hat (as called for in claim 8), or a ring (as called for in claim 9).

In an analogous art, Stockhammer teaches an authorization control device, as shown in the figure, that is formed by an object worn on the skin and provided with a sensor detecting biometric identification features of the skin (see Section [0008]). Stockhammer discloses that the authorization control device includes (a) an infrared (IR) sensor that measures subcutaneous pattern of arteries, veins, capillaries, etc. (i.e., biometric information) of a user wearing the authorization control device (see Sections [0011] and [0012]); (b) a biometric authentication unit that determined whether the user is an authorized user associated with the authorization control device (see Sections [0012]-[0013]); and (c) a wireless transponder that transmits a signal indicating that the user has been authenticated when the biometric authentication unit determines that the user is authorized (see Sections [0013] and [0016]). Per Stockhammer, objects worn on the skin include garments, such as a glove (as called for in claim 8) or a headband, and accessories, such as a ring (as called for in claim 9) (see Sections [0009] and [0012]). Because a hat is a garment and has a headband, it is understood that Stockhammer's authorization control device includes a hat (as called for in claim 8).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Smith and Murakami's master authenticator 10 as taught by Stockhammer because a master authenticator 10 that includes a glove, hat, or a ring is in contact with a user's skin, thereby enabling master authenticator 10's to measure a user's heartbeat via IR sensors 20 and 22 and determine if the user is an authorized user.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 2003/0025603) in view of Murakami et al. (US 6,483,929) as applied to claim 7 above, and further in view of Bianco et al. (US 6,256,737).

Regarding claim 10, Smith and Murakami's master authenticator 10 only has one biometric sensor; thus Smith and Murakami fail to teach the limitations called for in claim 10.

In an analogous art, Bianco teaches network system 202, as shown in Fig. 2, comprising a plurality of user computers 208, wherein each user computer 208 has one or more biometric devices attached to it such that a user is authenticated by biometric system 102 prior to access user computer 208 (see Col. 12, lines 12-23). Bianco's biometric devices include those that measure hand geometry, retina and facial images, breath (i.e., body chemistry), etc. (see Col. 12, lines 54-57). Bianco discloses that biometric system 102 is governed by biometric policies 504, such as an OR biometric policy, which would only require a user to pass either one of at least two biometric devices, or an AND biometric policy, which would require a user to be tested on at least two biometric devices and pass all the biometric devices that he/she was tested on (see Col. 30, lines 55-67 and Col. 31, lines 1-7). Fig. 18 illustrates the AND policy. Per Bianco, n number of biometric devices (where n is at least 2) is determined from a list of biometric devices at step 1802. Assuming that a user is to be tested on 2 ( $M=2$ ) of the biometric devices using the AND policy, Bianco's biometric system 102 requires the user to pass both biometric devices at

steps 1808 and 1814 (see Col. 32, lines 65-67 and Col. 33, lines 1-26). Because Bianco teaches that a user can be tested on more than 2 biometric devices (see Col. 33, lines 26-53); thus the list of biometric devices includes at least 3 biometric devices (i.e.,  $N \geq 3$ ). Consequently, Bianco does teach biometric system 102 requiring a biometric data match for at least two (i.e.,  $M=2$ ) of the at least 3 (i.e.,  $N=3$ ) biometric devices to determine that a user is authorized.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Smith and Murakami's master authenticator 10 as taught by Bianco because the combination of two or more biometric devices for authenticating a user enables the user to adjust the level of security protecting master authenticator 10 and the associated wireless device as needed (see Bianco, Col. 30, lines 4-14).

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 2003/0025603) in view of Murakami et al. (US 6,483,929) as applied to claim 12 above, and further in view of Gehlot (US 6,344,795).

Regarding claim 14, Smith and Murakami fail to teach that master authenticator 10 includes a notification structure that is a heating element or a cooling element.

In an analogous art, Gehlot, as shown in Fig. 1A, teaches a temperature-based alerting device (TBAD) 18a that comprises (a) a notification structure that notifies a user that user device 14 has received an incoming signal 12 (i.e., an occurrence of an event) (see Col. 3, lines 18-49 and Col. 4, lines 8-21 and 38-52). Per Gehlot, TBAD 18a generates a temperature alerting signal via a heating element or a cooling element (see Col. 3, lines 16-18 and Col. 4, lines 38-43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Smith and Murakami's master authenticator 10 as taught by Gehlot because a master authenticator 10 that notifies a user of the occurrence of an event by

generating a temperature alerting signal via a heating element or a cooling element eliminates various disadvantages associated with audible and vibratory alerts, such as audible alerts being disruptive in certain locations or situations (e.g., meetings, movie theaters, libraries, etc.) or vibratory alerts requiring mechanical moving parts that increases the overall size of a device (see Gehlot, Col. 1, lines 60-67).

14. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coughlin et al. (US 2004/0257202) in view of Smith (US 2003/0025603), Xydis (US 6,307,471), and Deng et al. (US 2003/0043078).

Referring to claims 32-35, claim 32 is substantially similar to claim 15, and claims 33-35 are identical to claims 18-20 respectively; hence, the rejections of claims 15 and 18-20 are maintained for claims 32-35. Claim 32, however, further calls for a dipole antenna connected to a wireless transceiver. Coughlin, as modified by Smith and Xydis, teaches all the limitations called for in claims 32-35, as explained in the rejections of claims 15 and 18-20, except PDA 202 having at least one dipole antenna coupled to PDA 202's wireless transceiver, which is configured in accordance with a Bluetooth™ protocol.

In an analogous art, Deng teaches a dipole antenna module formed on a printed circuit board of a Bluetooth™ chip for devices such as PDAs and mobile phones (see Sections [0005] and [0031]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Coughlin, Smith, and Xydis's PDA 202 as taught by Deng because forming a dipole antenna on a printed circuit board saves space on the printed circuit board and enables the main function circuit and the dipole antenna to be integrated on a single chip for miniaturization (see Deng, Sections [0006], [0013] and [0015]).

*Allowable Subject Matter*

15. Upon further consideration, the previous 35 USC 103(a) rejections of claims 13, 21, and 36 have been withdrawn because the prior art of record fails to teach or suggest a wireless body appliance having (1) a wireless receiver that receives a wireless notification signal from a wireless device identifying an event that has occurred and (2) multiple different notification structure, wherein the wireless notification signal identifies which type of notification structure is to be used to notify the user of the event. Consequently, claims 13, 21, and 36 are now objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Lopes (US 6,189,105) teaches a proximity detection system comprising a badge that transmits a coded message to a proximity reader associated with a computer. If the coded message is not received and the user is logged in, the computer automatically locks out the display, keyboard, or any other component.
- Roes et al. (US 2003/0147651) teach a helmet comprising a biometric sensor.
- Brackett et al. (US 2005/0114654) teach a wireless body appliance having a thumb print scanner that sends a wireless signal to a workstation or other device after verifying a user is an authorized user, and the user is then allowed to log in the workstation.
- King (US 2005/0162258) teaches a tactile notification system having heating or cooling elements.
- Hamid (US 7,111,174) teaches a biometric pendant.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (571) 272-3062. The examiner can normally be reached on 9:00 AM - 7:30 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CY  
18 October 2006

  
Clara Yang